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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules Concerning Low Power Radio and Automated Maritime Telecommunications System Operations in the 216-217 MHz Band	)	**WT Docket No. 95-56**
	)	RM-7784
	)	
	)	
	)	

To: The Commission - **Mail Stop 1170**

COMMENTS OF RADIO TELECOM AND TECHNOLOGY, INC.

1. Radio Telecom and Technology, Inc. ("RTT") hereby submits these comments in response to the Commission's *Notice of Proposed Rule Making* in the above-captioned proceeding, FCC 95-174, released May 16, 1995. RTT is the developer and manufacturer of the "T-NET" two-way wireless telecommunications system, which is currently being deployed in the Interactive Video and Data Service ("IVDS") in the 218-219 MHz band. RTT holds an experimental license to test the T-NET system in the 216-217 MHz band. RTT supports the creation of the Low Power Radio Service ("LPRS") as proposed in this proceeding but urges that LPRS technical standards be crafted so as not to preclude the introduction of low-power IVDS systems in the future.

2. There is little doubt that with modern technology, there is no longer any need for the 216-217 MHz band to remain fallow solely to serve as a guard band to protect TV

Channel 13 from interference.[1/] There are many ways to ensure no interference to TV reception, including (a) how far a potentially interfering transmitter is located from any television receiver tuned to Channel 13; (b) how low the power of the potentially interfering transmitter is; and (c) whether potentially interfering transmissions are limited to the time when television receivers tuned to Channel 13 are blanked out, as is the case with T-NET. The basic concept behind the proposed LPRS is very low power, which will help to ensure both that there is no interference to television reception and that many users will be able to operate in the band without mutually destructive interference.[2/] Using both confinement to the TV blanking interval[3/] and low power,[4/] the T-NET

1/ Channel 13 operates in the 210-216 MHz band, so the 216-217 MHz band is the equivalent of a first-adjacent television channel to Channel 13. Section 73.610(b) of the Commission's Rules requires a separation of 95.7 km (59.5) miles between the transmitters of first-adjacent-channel VHF television stations. That rule, of course, is based on the operation of two high-powered television transmitters, not the kind of low power equipment proposed in this proceeding.

2/ The importance of restricting all users to very low power was underscored by Phonic Ear, Inc. ("Phonic Ear") in its petition for rule making to open the 216-217 MHz band for use by auditory assistance devices. RTT is familiar with the Phonic Ear proposal and has discussed T-NET with Phonic Ear's engineering staff. RTT believes that the T-NET system can co-exist successfully with low power auditory assistance devices, with neither system causing any interference to or receiving any interference from the other.

3/ A T-NET transmitter used by a member of the general public transmits only when polled by a central station. If a TV Channel 13 signal is present, the central station uses the TV station's sync pulse to time the polling, so that the subscriber unit replies only when any TV receiver within about two miles that is tuned to Channel 13 is blanked out as part of the NTSC television blanking function. Since the TV receiver is blanked out, it could not experience interference even if the power of the T-NET signal were not low.

4/ The average power of a T-NET transmission from a subscriber unit is in the order of 100 milliwatts.

system would not be expected to cause or receive interference to or from low power devices used by handicapped persons or health care devices.[5/]

3. RTT hopes to have useful data from its experimental operations soon.[6/] At that time, it will propose specific amendments to Part 95 of the Rules to accommodate IVDS in the 216-217 MHz band. Meanwhile, RTT strongly urges the Commission to confine LPRS operations to the lowest possible power levels, as requested by LPRS proponents themselves, to ensure the maximum flexibility for use of that band in the future, without any risk of interference to reception of TV Channel 13.

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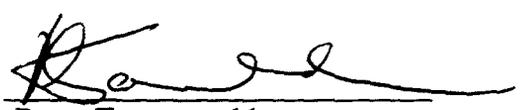
Respectfully submitted,



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5/ If interference did occur, it would be limited to situations where the T-NET and LPRS devices were in the same or nearby rooms in the same building. In that case, the LPRS user could protect him or herself simply by not utilizing the T-NET system at that location.

6/ RTT's experimental license is call sign KS2XSA, issued under Part 5 of the Commission's Rules. This license is for operation in the New York City area, where RTT will test and evaluate the performance of T-NET in cooperation with TV Station WNET, Channel 13, Newark, New Jersey.